



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Agrawal et al.

Serial No.: 10/757,345

Filed: January 14, 2004

Entitled: MODULATION OF IMMUNOSTIMULATORY
PROPERTIES OF OLIGONUCLEOTIDE-BASED COMPOUNDS BY UTILIZING
MODIFIED IMMUNOSTIMULATORY DINUCLEOTIDES

Examiner: NA

Group Art Unit: NA

Attorney Docket No.: HYB-018US1 (1006/019)

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants and their attorney are aware of the following publications and information listed on the attached PTO Form 1449, and in accordance with 37 C.F.R. §1.97 hereby submit these publications for the Examiner's consideration.

Applicants state that identifiers C4 and C25 are books which are too voluminous to include in this submission.

Applicants further state under 37 C.F.R. §1.97(e)(1) that none of the publications were cited in an International Search Report issued in connection with a counterpart Patent Cooperation Treaty application.

This submission does not represent that a search has been made and does not constitute an admission that the listed documents are material to patentability or that the listed documents

are prior art. If it should be determined that any of the listed documents constitute "prior art" under United States law, Applicants reserve the right to present to the Office relevant facts and law regarding the appropriate status of such documents.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits and is therefore submitted as both timely and proper. Therefore, no fees are believed to be due.

Respectfully submitted,

Date: 3/5/04

W. A. Keown
Wayne A. Keown
Reg. No. 33,923

Keown & Associates
500 West Cummings Park
Suite 1200
Woburn, MA 01801
781-938-1805 (Telephone)
781-938-4777 (Facsimile)



Subt. Form PTO-1449 SUPPLEMENTAL INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)	Docket Number	Application Number
	HYB-018US1	10/757,345
	Applicant	
	Agrawal et al.	
Filing Date	Group Art Unit	
January 14, 2004	NA	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	IDENTIFIER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	5,149,798	1992	Agrawal et al.			
	A2	5,635,377		Pederson et al.			
	A3	5,366,878		Pederson et al.			
	A4	5,652,355		Metelev et al.			
	A5	6,346,614		Metelev et al.			
	A6	6,143,881		Metelev et al.			
	A7	5,912,332					

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	IDENTIFIER	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	B1	WO 98/49288	11/1998	PCT				
	B2	WO 01/12804	2/2001	PCT				
	B3	WO 01/55370	8/2001	PCT				
	B4	PCT/US01/13682	4/2001	PCT				
	B5	PCT/US01/30137	9/2001	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	IDENTIFIER	
	C1	Agrawal et al., Meth. in Mol. Biol., "Protocols for Oligonucleotides and Analogs", 20:165-189.
	C2	Oligonucleotides and Analogues, A Practical approach, 87-108 (F. Eckstein, ed., 1991).
	C3	Uhlmann et al., Curr. Op. In Biotech., 6:12 (1995).
	C4	Crooke et al., Antisense Research and Applications, eds., CRC Press, Boca Raton, (1993).
	C5	Khorana et al., J. Mol. Bio., 72:209 (1972). Reese, Tetrahedron lett., 34:3143-3179 (1978).
	C6	Beaucage et al., Tetrahedron lett., 22:1859-1862 (1981).
	C7	Agrawal et al., Tetrahedron lett., 28:3539-3542 (1987).
	C8	Connolly et al., Biochem., 23:3443 (1984).
	C9	Jager et al., Biochem., 27:7237 (1988).
	C10	Agrawal et al., Proc. Natl. Acad. Sci. (USA), 85:7079-7082 (1988).
	C11	Kuramoto et al., Jpn. J. Cancer Res., 83:1128-1131 (1992).
	C12	Krieg et al., nature, 371:546-549 (1995).
	C13	Liang et al., J. Clin. Invest., 98:1119-1129 (1996).
	C14	Moldoveanu et al., Vaccine, 16:1216-124 (1998).
	C15	McCluskie et al., J. Immunol., 161:4463-4466 (1998).
	C16	Hartman et al., J. Immunol., 164:1617-1624 (2000).

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy with next communication to Applicant.



Subt. Form PTO-1449 SUPPLEMENTAL INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)	Docket Number HYB-018US1	Application Number 10/757,345
	Applicant Agrawal et al.	
	Filing Date January 14, 2004	Group Art Unit NA

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	IDENTIFIER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	IDENTIFIER	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

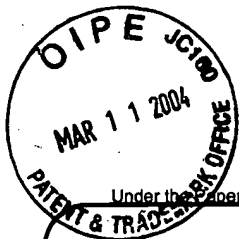
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	IDENTIFIER	
	C17	Zhao et al., Biochem. Pharmacol., 51:173-182 (1996).
	C18	Zhao et al., Biochem. Pharmacol., 52:1537-1544 (1996).
	C19	Zhao et al., Antisense Nucleic Acid Drug Dev., 7:495-502 (1997).
	C20	Zhao et al., Bioorg. Med. Chem. Lett., 9:3453-3458 (1999).
	C21	Zhao et al., Bioorg. Med. Chem. Lett., 10:1051-1054 (2000).
	C22	Yu et al., Bioorg. Med. Chem. Lett., 10:2585-2588 (2000).
	C23	Yu et al., Bioorg. Med. Chem. Lett., 11:2263-2267 (2001).
	C24	Kandimalla et al., Bioorg. Med. Chem., 9:807-813 (2001).
	C25	Remington's Pharmaceutical Sciences, 18th Ed., A. Gennaro, Mack Publishing Co. (1990).
	C26	Noronha et al., Biochem., 39:7050-7062 (2000).
	C27	
	C28	
	C29	
	C30	
	C31	
	C32	

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy with next communication to Applicant.



PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/757,345
Filing Date	January 14, 2004
First Named Inventor	Agrawal et al.
Art Unit	NA
Examiner Name	NA
Attorney Docket Number	HYB-018US1

ENCLOSURES (Check all that apply)

- | | | |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance communication to Technology Center (TC) |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application | | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

Remarks

- * PTO Form 1449
- * Copies of 36 references
- * Postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Wayne A. Keown, Ph.D. (Reg. No. 33,923)
Signature	<i>Wayne A. Keown</i>
Date	3/5/04

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Laura Labier		
Signature	<i>Laura Labier</i>	Date	3/9/04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.